

HAHN AND ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

August 14, 2014

Mr. Dana Bayuk
Oregon Department of Environmental Quality
Northwest Region, Portland Office
Portland Harbor Section
2020 SW Fourth Avenue, Suite 400
Portland Oregon 97201-4987

HAI Project No. 2708
DEQ ECSI File No. 84

**SUBJECT: Progress Report, NW Natural Site, 7900 NW St. Helens Avenue and
7200 NW Front Avenue, Portland, Oregon**

Dear Mr. Bayuk:

Hahn and Associates, Inc. (HAI) has prepared this monthly Progress Report summarizing Remedial Investigation/Feasibility Study (RI/FS) and source control-related work activities conducted by NW Natural relating to historic manufactured gas plant (MGP) activities at the NW Natural Site during the month of July 2014. NW Natural is completing upland investigatory activities at the NW Natural Site under the Voluntary Agreement No. ECVC-WMCVC-NWR-94-13 (Voluntary Agreement) between NW Natural and the Oregon Department of Environmental Quality (DEQ).

1.0 Communications and Document Submittals

In correspondence dated July 2, 2014 (Dana Bayuk to Tim Stone), DEQ provided a request for supplemental information (for files) related to a June 13, 2014 material disposal request. Anchor QEA provided the requested information in correspondence (Tim Stone to Dana Bayuk) on the same day.

In correspondence dated July 8, 2014 (Dana Bayuk to Bob Wyatt), DEQ provided comments on the Anchor QEA document entitled *Revised Final Hydraulic Source Control and Containment System Groundwater Model Update Report*, dated June 2014.

In correspondence dated July 15, 2014 (Dana Bayuk to Bob Wyatt), DEQ provided comments from review of the Anchor QEA document entitled *Fill Water Bearing Zone (WBZ) Trench Sampling and Analysis Plan and Quality Assurance Project Plan (QAPP)*, dated June 2014.

A program management implementation call was conducted with DEQ on July 10, 2014 to discuss NW Natural program management and project schedules.

A technical meeting was held via teleconference on July 21, 2014 with representatives of NW Natural, Siltronic, and DEQ in attendance. Topics discussed during the meeting were primarily related to on-going source control activities and pending reports/plans.

In correspondence dated July 21, 2014 (Terry Driscoll to Dana Bayuk), Aponowich, Driscoll & Associates, Inc. (ADA), on behalf of NW Natural, submitted a waste determination for filter press cake and bag filter solids generated at the Gasco wastewater treatment plant.

In correspondence dated July 24, 2014 (Dana Bayuk to Bob Wyatt), DEQ provided comments from review of NW Natural's June 24, 2014 revised proposal for resolving remaining conditions for finalizing the Gasco site uplands HERA report.

In correspondence dated July 25, 2014 (Dana Bayuk to Bob Wyatt), DEQ provided correspondence reminding NW Natural of its request that NW Natural prepare a plan for locating or confirming the status of the old basalt zone water supply well at Gasco.

In correspondence dated July 30, 2014 (Ben Hung to Dana Bayuk), Anchor QEA, on behalf of NW Natural, requested a two day extension (to August 8, 2014) for submittal of a response to DEQ's July 15, 2014 review of the Fill WBZ Trench SAP and QAPP.

2.0 Field Work

Phase 1 Step 5 Testing of the Groundwater Source Control Extraction System occurred during July 2014 (July 10, 2014 through July 17, 2014).

Supplemental DNAPL investigation-related activities associated with the approved Siltronic property RI Field Sampling Plan, including boring installation and core collection, were completed in July 2014.

HAI field activities related to monitoring and maintenance of the dense non-aqueous phase liquid (DNAPL) extraction system at surficial fill well locations MW-6-32 and MW-13-30 occurred during July. The system recovered approximately 13 gallons of fluids, primarily DNAPL, during this time.

Tasks related to optimization of the hydraulic control and containment system and the wastewater treatment system (continued operation and testing) were conducted in July 2014.

Baseline DNAPL removal as needed to maintain at levels below the tops of the well sumps, was conducted by Anchor QEA in the following wells near the river shoreline.

- MW-16-45
- MW-18-30
- MW-26U
- MW-27U
- MW-34L
- MW-38U
- MW-PW-2L
- PW-2L
- WS-14-161

On March 31, 2014 NW Natural discontinued discharges of treated groundwater to the sanitary sewer (Industrial Wastewater Discharge Permit 500.022), with all water instead being directed to NW Natural's on-site wastewater treatment plant followed by discharge to the Willamette River via permitted outfall National Pollutant Discharge Elimination System (NPDES) Permit No. 103061 (expires August 31, 2018). Results from NW Natural's NPDES effluent sampling are provided to DEQ in Discharge Monitoring Reports that are submitted on a monthly basis in accordance with the permit. As of July 31, 2014 a total of 49,263,680 gallons of treated water were discharged under the NPDES permit.

Decommissioning and removal of the existing (now dormant) treatment system plumbed to the sanitary sewer as described in Industrial Wastewater Discharge Permit 500.022, initiated during May 2014, was completed in July 2014.

3.0 Anticipated Activities August and September 2014

NW Natural and DEQ technical working group communications and meetings are anticipated to occur as needed during August and September 2014 to discuss ongoing project tasks, including DEQ-requested revisions to the Gasco HERA document.

As described in an August 8, 2014 e-mail (John Edward to Dana Bayuk) NW Natural plans to install two additional upper alluvium extraction wells (PW-15U and PW-16U) in Segment 2 at the Gasco site in late August, subsequent to discussions with, and approval from, DEQ that are scheduled to occur in early August.

Groundwater sampling activities as described within the Integrated Groundwater Monitoring Program (combined HC&C system Performance Monitoring and the Routine Monitoring Programs) are anticipated to be initiated as soon as details regarding DEQ's request to incorporate TPH, EPH, and VPH testing into the groundwater analyte list at select locations are agreed upon. The next sampling event will constitute NW Natural's third quarter 2014 monitoring event for the Gasco and Siltronic properties.

Initiation of supplemental Doane Creek investigation activities remain contingent upon receipt of DEQ confirmation that the analyte list and screening levels are suitable for the Siltronic MGP Human Health and Ecological Risk Assessment. Legal access agreements with the off-site property owner (Burlington Northern Railroad) will also be necessary prior to initiation of field activities.

A site tour with representatives of NW Natural, Siltronic, and DEQ is scheduled to occur on September 5, 2014.

Transport and recycling of the oil-water mixture originating from the TCE CMMA of the NW Natural Gasco Site will be scheduled following further feedback and discussion with DEQ related to NW Natural's request for DEQ concurrence with a proposal to recycle the material.

The following reports and work plans for the Site have been submitted to DEQ through the date of this progress report. Unless otherwise noted, NW Natural has not received DEQ comments on these documents.

- NW Natural's June 5, 2014 request (Rob Ede to Dana Bayuk) requesting concurrence of a final proposed analyte list and screening levels for use in the Doane Creek-related FSP being conducted as part of the Siltronic property RI.
- Request for concurrence for transport and recycling of oil-water mixtures originating from the Trichloroethene Contaminated Media Management Area (TCE CMMA) of the NW Natural Gasco Site (Tim Stone to Dana Bayuk), dated June 13, 2014. Discussions with DEQ regarding this item have been on-going. During a program management implementation coordination call that took place on August 7, 2014, Dana Bayuk indicated that additional feedback on this submittal would likely be provided mid-August 2014.
- *Waste Determination for Filter Press Cake and Bag Filter Solids Generated at the Gasco Wastewater Treatment Plant*, transmitted by ADA (Terry Driscoll to Dana Bayuk), dated July 21, 2014. Discussions with DEQ regarding this item have been ongoing. During a program management implementation call that

took place on August 7, 2014, Dana Bayuk indicated that additional feedback on this submittal would likely be provided mid-August 2014.

- *Response to DEQ's July 15, 2014 Comments on the Fill WBZ Trench SAP and QAPP, NW Natural Gasco Site*, transmitted by Anchor QEA (John Edwards and Jeff Warren to Dana Bayuk), dated August 8, 2014.
- Partial Responses (revised model cross-section figures and a redline version of Table 2) to DEQ's July 8, 2014 comments on the June 2014 Submittal of the *Revised Final Model Update Report*, transmitted by Anchor QEA on August 7, 2014 (Pradeep Mugunthan to Dana Bayuk). DEQ has been in verbal communication with the Anchor QEA team (telephone calls to Pradeep Mugunthan and John Renda on August 12, 2014) to seek clarifications on the revised model cross-section figures. DEQ has indicated a written response will be provided shortly.
- *Response to DEQ Request for Supplemental Information on Location of Former Industrial Use Supply Well, Mult 802, NW Natural Gasco Property*, transmitted by HAI (Rob Ede to Dana Bayuk), dated August 13, 2014.

Should you have any questions, please contact the undersigned.

Sincerely,



Rob Ede, R.G.
Principal

robe@hahnenv.com

- c:
- Mr. Bob Wyatt, NW Natural (electronic only)
 - Ms. Patty Dost, Pearl Legal Group PC (electronic only)
 - Ms. Sarah Riddle, Pearl Legal Group PC (electronic only)
 - Mr. Carl Stivers, Anchor QEA, L.L.C. (electronic only)
 - Mr. John Edwards, Anchor QEA, L.L.C. (electronic only)
 - Mr. Ben Hung, Anchor QEA, L.L.C. (electronic only)
 - Mr. Ryan Barth, Anchor QEA, L.L.C. (electronic only)
 - Mr. Henning Larsen, DEQ NW Region (electronic only)
 - Mr. Tom Gainer, DEQ NW Region (electronic only)
 - Mr. Keith Johnson, DEQ NW Region (electronic only)
 - Mr. Myron Burr, Siltronic Corporation (electronic only)
 - Ms. Kristine Koch, Region 10 EPA (electronic only)
 - Mr. Sean Sheldrake, Region 10 EPA (electronic only)
 - Mr. Rene Fuentes, Region 10 EPA (electronic only)
 - Mr. Lance Peterson, CDM, Inc. (electronic only)